Defense Information Infrastructure (DII)

Common Operating Environment (COE)

Installation Procedures (IP) for
Unified Build (TMS/UCP) Version 3.0.2.5P2

Document Version 1.0

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1. Scope

1.1 Identification

This Installation Procedure (IP) documents Unified Build (UB), Version 3.0.2.5P2.

UB Version 3.0.2.5P2 is hosted on the following platforms:

- C Hardware: Tactical Advanced Computer, TAC-3 (HP750/755)/TAC-4 (J210)
  Operating System: HP-UX 10.20
  DII COE Kernel: 3.0.1.0 (with patches P1, P2, P3, and P4)

- C Hardware: Sparc 10/20
  Operating System: Solaris 2.5.1
  DII COE Kernel: 3.0.0.3 (with patches P2, P3 (Ultra Sparc only), P4, P5, and P6)

1.2 System Overview

The Unified Build (UB) is derived from a command and control system originally designed for the afloat Navy—JOTS (Joint Operational Tactical System). As JOTS expanded to meet the needs of both the afloat and ashore Navy-related communities, it was identified as the Unified Build. The present day UB is the result of combining automated Command, Control, Communications, Computers, and Intelligence (C4I) components, Common Operating Environment, and other vital software to fulfill Joint community requirements.

The Unified Build, consisting of the Track Management System (TMS) and the Universal Communications Processor (UCP), forms the core of a C4I system which interfaces to a variety of military communications and computer systems. UB is designed to meet the unique tactical situation assessment, data fusion, and display needs of battle group and force commanders, subordinate warfare commanders, ship commanding officers, and shore command centers.

The UB concept evolved as the result of various C4I initiatives over a period of several years and culminated with the development of a command and control system in which specific applications are built on top of a "superset" of core software. The core software includes track database management, communications interfaces, message processing, track correlation, database management, and tactical display capabilities. A system fielded using UB to provide core services is usually installed on workstations across a local area network (LAN) and a wide area network (WAN), where operators perform certain tasks.

Related Documents

C   *Software Test Report (STR) for Unified Build (TMS/UCP) Version 3.0.2.5P2*, 15 October 1997, INRI.

C   *Software User's Manual (SUM) for Unified Build (TMS/UCP) Version 3.0.2.5*, 14 April 1997, INRI, with update pages for 3.0.2.5P1 dated 1 August 1997 and update pages for 3.0.2.5P2 dated 15 October 1997.

C   *Software Version Description (SVD) for Unified Build (TMS/UCP) Version 3.0.2.5P2*, 15 October 1997, INRI.

C   *System Administrator's Manual (SAM) for Unified Build (TMS/UCP) Version 3.0.2.5*, 14 April 1997, INRI.

2.   Referenced Documents

The following documents are referenced elsewhere in this IP:

2.1   Government Documents

None.

2.2   Non-government Documents

a.   *Software Version Description (SVD) for Unified Build (TMS/UCP) Version 3.0.2.5P2*, DII.3025P2.HP1020_SOL251.UB_SVD_1.0, 15 October 1997.

3.   System Environment

3.1   System Requirements

3.1.1   Hardware Requirements

UB Version 3.0.2.5P2 is hosted on the following hardware:

C   Tactical Advanced Computer, TAC-3 (HP750/755)/TAC-4 (J210)
C   Sparc 10/20

The following configuration is recommended:

C   RAM: 128 MB minimum; 192 optimum
C   Disk space: 2 GB
C   Swap Space: 300 MB

3.1.2   Operating System Requirements

UB Version 3.0.2.5P2 requires the following operating systems:

- C   HP-UX 10.20 (TAC-3/TAC-4)
- C   Solaris 2.5.1   (Sparc 10/20)

3.1.3   Kernel Requirements

UB Version 3.0.2.5P2 requires the following DII COE Kernels:

- C   TAC-3/TAC-4
    - UB 3.0.2.5 build requires Kernel 3.0.1.0
    - 3.0.2.5P2 update requires patches P1, P2, P3, and P4 for Kernel 3.0.1.0

- C   Sparc 10/20
    - UB 3.0.2.5 build requires Kernel 3.0.0.3
    - 3.0.2.5P2 update requires patches P2, P3 (Ultra Sparc only), P4, P5, and P6 for Kernel 3.0.0.3

3.2   System and Site Preparations

3.2.1   System Configuration

The following software must be properly installed prior to loading Unified Build 3.0.2.5P2:

- C   appropriate operating system (as described above)
- C   appropriate DII COE Kernel (as described above)
- C   Unified Build 3.0.2.5

3.2.2   Operating System Preparation

Information needed to prepare the operating system is described in these documents:

- C   *Kernel Installation Guide (HP-UX 10.20), Version 3.0.1.0,* 14 April 1997.
- C   *Kernel Installation Guide, (Solaris 2.5.1), Version 3.0.0.3,* 7 April 1997.

3.2.3   Tape/Disk Preparation

The following unclassified tapes contain the Unified Build 3.0.2.5P2 software.

- C   4mm DAT cartridge, intended for TAC-3/TAC-4 hardware environment
- C   8mm EXABYTE cartridge, intended for Sparc 10/20 hardware environment

4. Installation Instructions

Unified Build 3.0.2.5 is a component of a DII 3.1 C4I system. The following installation procedures describe how to install this 3.0.2.5P2 patch software.

4.1 Media Booting Procedures

To prepare a tape for installation:

1. Insert the tape in the DAT drive.

2. Select the System Administration SEGMENT INSTALLER utility.

3. Select the source and click READ CONTENTS. The contents of the tape appear in the SELECT SOFTWARE TO INSTALL portion of the SEGMENT INSTALLER window.

4.2 Installation Procedures

If the system does not contain previously installed software, the operating system (OS) and Kernel, with all patches, must be installed.

1. Install the appropriate OS and Kernel.

    a. Detailed installation instructions for HP 10.20 are in the *Kernel Installation Guide (HP-UX 10.20), Version 3.0.1.0,* 14 April 1997.

    b. Detailed installation instructions for Solaris 2.5.1 are in the *Kernel Installation Guide, (Solaris 2.5.1), Version 3.0.0.3,* 7 April 1997.

2. Ensure the appropriate Kernel patches are installed. The Kernel patches are *not* roll-up patches. Each of the patches (for the appropriate OS) must be installed consecutively.

    a. HP: 3.0.1.0 Kernel patches P1, P2, P3, and P4.
    b. Solaris: 3.0.0.3 Kernel patches P2, P3 (Ultra Sparc only), P4, P5, and P6.

3. Ensure Unified Build (UB) 3.0.2.5 is installed (from the DII 3.1 delivery tape):

4. Install the UB 3.0.2.5P2 patch from the tape.

    a. Highlight UB 3.0.2.5P2.
    b. Click INSTALL.

4.3   Installation of Upgrades

Software previously installed on a system is listed in the CURRENTLY INSTALLED SEGMENTS portion of the INSTALLER window. To install the 3.0.2.5P2 upgrade on a system with previously installed software:

1.   It is not necessary to deinstall any software.

2.   Ensure the appropriate DII COE Kernel patch is installed.

   a.   HP: 3.0.1.0 Kernel patches P1, P2, P3, and P4.
   b.   Solaris: 3.0.0.3 Kernel patches P2, P3 (Ultra Sparc only), P4, P5, and P6.

3.   Install UB 3.0.2.5P2 patch from the tape.

   a.   Highlight UB 3.0.2.5P2.
   b.   Click INSTALL.

4.4   Installation Verification

All successfully installed segments are listed in the CURRENTLY INSTALLED SEGMENTS portion of the INSTALLER window.

4.5   Initializing the Software

Reboot the system after the successful installation of all segments.

4.6   List of Changes and Enhancements

This patch contains corrections to Version 3.0.2.5P1. See *Software Version Description (SVD)* [Section 2.2 (a)] for details.

4.7   Important Considerations

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5.   Notes

5.1   Acronyms

C4I	Command, Control, Communications, Computers, and Intelligence
COE	Common Operating Environment
DAT	Digital Audio Tape
DII	Defense Information Infrastructure
DFARS	Defense Federal Acquisition Regulation Supplement
GB	Gigabyte
HP-UX	Hewlett-Packard UNIX-based Operating System
INRI	Inter-National Research Institute, Inc.
IP	Installation Procedures
JOTS	Joint Operational Tactical System
LAN	Local Area Network
MB	Megabyte
RAM	Random Access Memory
SAM	System Administrator's Manual
STR	Software Test Report
SUM	Software User's Manual
SVD	Software Version Description
TAC-3/TAC-4	Tactical Advanced Computer, Version 3/4
TMS	Tactical Management System
UB	Unified Build
UCP	Universal Communication Processor
WAN	Wide Area Network